



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,358	01/22/2004	Shin Koike	247071USDIV	3263
22850	7590	01/21/2009	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			RAE, CHARLESWORTH E	
			ART UNIT	PAPER NUMBER
			1611	
			NOTIFICATION DATE	DELIVERY MODE
			01/21/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	<p>Application No. 10/761,358</p>	<p>Applicant(s) KOIKE ET AL.</p>	
	<p>Examiner CHARLESWORTH RAE</p>	<p>Art Unit 1611</p>	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 17 December 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: _____.
- Claim(s) objected to: _____.
- Claim(s) rejected: _____.
- Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Sharmila Gollamudi Landau/
Supervisory Patent Examiner, Art Unit 1611

/C.R/ Examiner, Art Unit 1611

Continuation of 11. does NOT place the application in condition for allowance because: it is the examiner's position that the combination of the cited references establishes a prima facie case of obviousness for the reasons previously made of record in the prior Office action, mailed 09/17/08, pages 3-13; see also applicant's Response, received 12/17/08, pages 2-7).

First, it is noted that all of the cited references are directed to foods and it is the examiner's position that is routine in the art to manipulate the ingredients of food compositions, as well as the relative amounts of the ingredients, depending on various factors such as consumer preferences, stability, caloric/nutritional value, and health-related effects.

Second, Yasukawa et al. exemplify stable diglyceride mixture compositions comprising 2% monoglycerides, 80% diglycerides, 18% triglycerides, and 89.3% unsaturated fatty acids, which overlaps with the instant claimed monoglyceride, diglyceride, triglyceride, and unsaturated fatty acids (cols. 9-10). Yasukawa et al. teach compositions wherein the diglycerides may comprise of aliphatic acid (acyl) moieties having 8 to 24 carbon atoms, which addresses the same problem that the instant invention is directed to solve with respect to stability (col. 2, line 65 to col. 4, line 1, especially col. 3, line 50 to col. 4, line 9; see also applicant's Response, page 2, lines 11-12). Yasukawa et al. teach glyceride mixture may comprise 5 to 100% by weight of a diglyceride, wherein the glyceride comprise 70 wt. %, or more, of unsaturated aliphatic moieties (col. 2, line 65 to col. 4, line 11). In particular, Yasukawa et al. teach that the diglycerides can contain 40 percent by weight, or more, diglycerides having unsaturated and saturated aliphatic acid moieties, which reasonably encompass the instant claimed limitation of "omega-3 unsaturated acyl groups having at least 20 carbon atoms and monoenoic acyl groups in acyl groups constituting the diglyceride are about 15 to 89.5 % by weight and about 10 to 84.5 % by weight, respectively, based on a weight of acyl groups in said diglyceride." Yasukawa et al. also teach that suitable glyceride mixtures include oils and fats having an elevated content of diglycerides obtained either by the interesterification or esterification of a mixture of glycerol with at least one oil or fat having a high content of unsaturated fatty acid residues selected from the group consisting of safflower oil, olive oil, ..., rapeseed oil, ..., fish oil (col. 6, lines 24-38). It is noted that applicant discloses that the diglyceride can be obtained by an optional process such as transesterification of any of various oils from various oils such as fish oil and rapeseed oil containing omega-3 type unsaturated acyl groups, monoenoic acyl groups, omega-6 type unsaturated acyl groups, etc. with glycerol or esterification of a fatty acid derived from such an oil with glycerol (specification, page 6, line 24 to page 7, line 15). Although Yasukawa et al. does not expressly teach diglycerides comprising the specific instantly claimed content of omega-3 unsaturated acyl groups having at least 20 carbon atoms and monoenoic acyl groups in acyl groups constituting the diglyceride are about 15 to 89.5% by weight and about 10 to 84.5% by weight, respectively, to the extent that Yasukawa et al. teach the same method for preparing mixtures of diglycerides via interesterification or esterification of an edible oil (e.g. fish oil or rapeseed oil) in the presence of glycerol as disclosed by applicant, one would reasonably expect that amounts of the diglycerides having unsaturated acyl groups would be similar to the instant claimed amounts of diglycerides having 15 to 89.5 wt. % of omega-3 unsaturated acyl groups having at least 20 carbon atoms and monoenoic acyl groups because both the instant application and the prior art teach the same method of deriving diglycerides from fish oil or rapeseed oil and it is also well known that edible oils such as fish oils and rapeseed oils comprise high contents of omega-3 (see col. 8, Table 2, and col. 10, Table 5; see instant specification, page 7, line 24 to page 8, line 3). Further, one would have been motivated to manipulate the specific amounts of the diglycerides, including applicant's claimed amounts of diglyceride acyl groups, to optimize the stability of the composition and also to reduce the tendency of smoke on heating associated with said compositions comprising a combination of monoglycerides and diglycerides because Yasukawa et al. suggest that compositions comprising diglycerides in amounts of less than 5% may affect the solubility of other ingredients in the composition and also that diglyceride in amounts of 8 to 80% by weight reduces the smoking tendency of compositions comprising diglyceride in combination with monoglyceride (col. 5, lines 55-66). Besides, Igarashi et al. suggest that there is a strong desire to develop a safe substance comprising omega-3 unsaturated fatty acids to maintain homeostasis. Thus, applicant's argument that the prior art does not suggest the manipulation of the amounts of the instantly claimed diglyceride acyl component is not found to be persuasive because Igarashi et al. suggest the use of a safe substance to provide omega-3 acyl groups which does not preclude the use of rapeseed or fish oil derived omega-3 acyl groups as taught by Yasukawa et al. since rapeseed oil and fish oils are considered to be safe for human consumption.

With respect to applicant's arguments that the prior art does not teach or suggest the instant claimed monoenoic acyl groups based on a weight of acyl groups in said diglyceride and that the mere suggestion to adjust the ratio of omega-6 unsaturated fatty acids to omega-3 unsaturated fatty acids as taught by Igarashi to maintain homeostasis of the body fails to provide any suggestion to arrive at the instant claimed amount of 10-84.5 wt. % of monoenoic acyl groups, it is the examiner's position that one would have been motivated to add diglycerides comprising monoenoic acyl as taught by Tanaka et al. to the composition as taught by Yasukawa et al. to improve the stability of the composition. One would have been motivated to do so because Tanaka et al. suggest that diglycerides comprising monoenoic acid groups can be used as emulsifiers in food compositions (abstract and col. 4, lines 16-45). Besides, it is the examiner's position that it is routine in the art to add one or more emulsifying agent (e.g. monoenoic acid - diglyceride) to oil compositions to improve the stability of the composition such that would reasonably expect to manipulate the amount of said emulsifying agent, including applicant's instant claimed amount of monoenoic acyl groups, to optimize the stability of the composition.

With respect to the term "at most about 5% by weight of a free fatty acid" as recited in claim 6, the examiner has clearly indicated in prior Office actions that this term reads on "zero amount" (See Office action, mailed 03/03/08, page 5, lines 19-21; and Office action, mailed 06/06/07, page 8, last two lines to page 9, first two lines; see also, applicant's response, page 4)). Thus, applicant's argument that this limitation has not been satisfied is not found to be persuasive to overcome the rejection of record.

With respect argument that even though the tertiary references (Nieuwenhuyzen et al. Szesniak et al., and Young et al.) may be used in food compositions containing an oil phase the references fail to suggest the claimed diglyceride content in terms of omega-3 unsaturated fatty acids or monoenoic acyl groups, it is the examiner's position that the cited references do establish a prima facie case of obviousness for the reasons previously made of record (see Office action, pages 9-13).

In view of the fact that the prior art is directed to solve the same problem as the instant claimed invention regarding the stability of compositions comprising monoglycerides, diglycerides and triglycerides, coupled with the fact that applicant has not provided any objective evidence to show unexpectedness or superior results of the instant claimed invention over the prior art, the rejection is maintained.

